APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,954	09/26/2000	Edwin E. Klingman	54208-0038	4408

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EXAMINER
AUVE, GLENN ALLEN

ART UNIT	PAPER NUMBER
2181	7

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application N .	Applicant(s)
Office Action Summary	09/670,954	KLINGMAN, EDWIN E.
	Examiner	Art Unit	
	Glenn A. Auve	2181	

-- The MAILING DATE f this communication appears on the c ver sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7,8,10-12 and 16-19* is/are rejected.

7)☒ Claim(s) *5,6,9 and 13-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5*.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 10,11,18, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is rejected based on lack of positive antecedent basis of "the stored data" on line 8.

Claim 11 is rejected because it depends on claim 10.

Claim 18 is rejected because it is not clear what is meant by "at least endpoint associated..." on line 2.

Claim 19 is rejected because it depends on claim 18.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-4,7,8,10,12, and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Larky et al., U.S. Pat. No. 6,389,495 B1.

As per claim 1, Larky et al. (Larky) shows a serial interface engine (128) for generating and interpreting packets on the serial bus and transferring data between the bus and a data port; and an interfacing device connected between the data port of the serial interface engine and the function engine including a configuration module for configuring communication channel between the slave and host ((126) and at least in cols. 4-7 which describe how the device is configured to operate when it is added to the system). Larky shows all of the elements recited in claim 1.

As for claim 2, the argument for claim 1 applies. Larky also shows that the interface device includes at least one register storing configuration information relating to the communication channel between the slave and host; at least one memory that hold operating data (122); wherein the configuration module is connected to the memory and includes a plurality of finite state machines operative to receive and respond to a request from the host (cols. 4-7). Larky shows all of the elements recited in claim 2.

As for claim 3, the argument for claim 2 applies. Larky also shows that the configuration module includes a first state machine for receiving and storing host requests and having an output signal indicating the packet is stored and ready for interpretation; a second state machine for accessing and interpreting the packet and having an output line carrying a transfer control signal, and activating the control signal based on the interpretation; and at least one data transfer state machine for transferring the requested data (cols. 4-8 which describe how the controller 126 is made up of state machines that manage the data transfer operations of the system). Larky shows all of the elements recited in claim 3.

As for claim 4, the argument for claim 3 applies. Larky also shows that the request is a GET_DESCRIPTOR request; and the data transfer state machine delivers at least a seventeen

byte descriptor to the serial interface to be delivered to the host (cols.9-10). Larky shows all of

the elements recited in claim 4.

As for claim 7, the argument for claim 1 applies. Larky also shows at least one endpoint

associated with the function engine; and a group of state machines associated with the endpoint

(cols. 7-8 and Table 1). Larky shows all of the elements recited in claim 7.

As for claim 8, the argument for claim 7 applies. Larky also shows that the endpoint

includes an endpoint register having a type field for indicating the type of transfer the endpoint

supports; and wherein the type field is accessible by at least one of the state machines (Table 1

and cols. 7-8). Larky shows all of the elements recited in claim 8.

As for claim 10, the argument for claim 7 applies. Larky also shows that the endpoint is

an OUT type endpoint; wherein the state machines associated with the endpoint include a data

storage state machine and a command state machine (cols. 7-8 and Table 1). Larky shows all

of the elements recited in claim 10.

As for claim 12, the argument for claim 7 applies. Larky also shows that the endpoint is

an IN type endpoint; wherein the state machines associated with the endpoint include a data

collecting state machine and a command state machine (cols. 7-8 and Table 1). Larky shows all

of the elements recited in claim 12.

As for claim 16, the argument for claim 1 applies. Larky also shows at least two

endpoints associated with the function engine; and a group of state machines associated with

each endpoint (cols. 7-8 and Table 1). Larky shows all of the elements recited in claim 16.

As for claim 17, the argument for claim 16 applies. Larky also shows that the first

endpoint is an OUT type endpoint and the state machines associated with the endpoint include

a data storage state machine and a command state machine (cols. 7-8 and Table 1). Larky

shows all of the elements recited in claim 17.

As for claim 18, the argument for claim 1 applies. Larky also shows at least endpoint associated with the function engine; and a memory buffer having a plurality of storage locations associated with the endpoint; and an endpoint register having an index for addressing the buffer (col. 10). Larky shows all of the elements recited in claim 18.
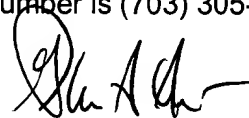
Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references also show USB systems with serial interface engines.

6.   Claims 5,6,9, and 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-Th 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Glenn A. Auve
Primary Examiner
Art Unit 2181

gaa
May 30, 2003